





# National Conference on Re-imagining Technical and Vocational Education and Training for the Changing World: Perspectives and Practices

11-12 February 2020





#### **Brochure**

#### **PSS Central Institute of Vocational Education**

(a constituent unit of National Council of Educational Research and Training, under Ministry of Human Resource Development, Government of India)

Shyamla Hills, Bhopal – 462013, Madhya Pradesh, India

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# National Conference on Re-imagining

# Technical Vocational Education and Training for the Changing World: Perspectives and Practices

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#### 1.0 BACKGROUND

Technical and Vocational Education and Training (TVET), dealing with the acquisition of knowledge and skills for the world of work is an action agenda across the world for skilling the workforce for both the organized and unorganized sectors. TVET policy is being implemented to bring about necessary changes for promoting inclusion, speed, scale and sustainability. A separate Ministry of Skill Development and Entrepreneurship (MSDE) has been created by the Government of India to bring about greater coordination and cohesiveness in skilling ecosystem. The Ministry of Human Resource Development (MHRD) is one of the major central ministries responsible for skilling the people through an integrated model of vocational and general education and skill development schemes and programmes run by various formal institutions.

TVET will have to play a vital role in educating and skilling people for the changing demands of the job market and the world of work. Artificial intelligence is going to revolutionize the manufacturing of goods and services, which will impact the job market and the aims and mission of TVET. Therefore, the need of the hour is to impart skills that matches with the skill needs of the emerging industry, including Industry 4.0, which has given rise to the new digital technology.

Today, employers look for skilled people who have the ability to create and digitalize information and technologies, rather than who have specialized in traditional technology. TVET need to respond to these changes and practices and the focus should be to prepare Vocational Teachers and Trainers to meet the new challenges of  $21^{\rm st}$  century and Industry 4.0. At the same time also technologies need to be promoted to reduce and recycle wastes for sustainable development and a greener economy. Skilling and upskilling programmes that prepare TVET teachers and educators for the  $21^{\rm st}$  century skills and newer technologies are needed.

Learners have to adapt to the new digital technologies and blending learning approaches to TVET. Improving the learning outcomes of the vocational students will require programmes that are designed to improve the knowledge and skills of vocational teachers and trainers through a standardised system of delivery of training on vocational pedagogy and domain specific areas. Also, aligning the curriculum to the needs of digital technologies and IT-enabled services will be useful in addressing the skills demands of the employer and the industry and at the same time would help in smooth transition of the people from the academic setting to the world of work.

Bearing in mind the dynamics of skills for economic growth, the Indian government has made changes in its skill policy and institutional setup for achieving the agenda of 'Skill India' in a 'mission mode'. Steps are being taken to unite the existing skills training initiatives and combine the scale and quality of skilling efforts. It is facilitating the entry of a large population of skilled people in labour market. Considering the regional diversity, the major challenge is to address the different facets of inequality in the labour market and society in general. As we prepare for skilling the new-age workforce for industry 4.0, widespread and equitable access to skilling and developing capabilities would be an important step towards overcoming labour market inequality, and disparity in the rural incomes. Creating an ecosystem for access to new skills in technology and innovation will be crucial in enabling developing countries to play an inclusive role in the global market.

Indian education system is investing in new learning pathways, game-changing initiatives and programmes and supporting new partnerships and networks, with the involvement of various stakeholders. The National Conference on "Re-imagining Technical and Vocational Education and Training for the Changing World: Perspectives and Practices" brings together the various stakeholders in TVET to discuss the emerging trends in perspectives and practices on skilling people through TVET for new and emerging technologies, with a focus on Industry 4.0. It will also provide a forum for discussion on preparing youth for entrepreneurship through TVET, reforming TVET for achieving Sustainable Development Goal-2030 and professional development of TVET teachers. The major aim of the conference is to provide future perspectives and direction for influencing the policies and decisions that will improve the delivery and quality of TVET.

#### 2.0 OBJECTIVE

- To examine the latest trends in TVET development and workforce employment;
- To elucidate strategies and approaches towards successful diffusion of Industry 4.0 through TVET for workforce development;
- To discuss the challenges and issues of Industry 4.0 in workforce and TVET teachers development; and
- To exchange innovative ideas and practices for supporting the TVET for workforce development.

#### 3.0 THEMES

The key thematic areas of significance for deliberation in relation to TVET, include the following:

- 1. Emerging Perspectives in Future of Work
- 2. Transforming TVET for Industry 4.0
- 3. Up- skilling and Re-skilling of Today's Workforce and TVET Teachers Development for Industry 4.0
- 4. TVET Excellence and Innovation
- 5. TVET for Rural Transformation and SDG 2030 Implementation
- 6. Future Agenda for TVET
- 7. Cross-sharing of Experiences, Best practices and Approaches of TVET Excellence

#### 4.0 EXPECTED OUTPUTS

- Networking among institutions and participants in TVET
- Shared innovative ideas and best practices
- Recommendations for affirmative actions in improving TVET

#### **5.0 DELEGATES**

The Conference will be attended by TVET administrators, policy makers, officials from ministries, researchers, academic professionals, representatives and experts from various international and national organizations, teachers, students, practitioners and other stakeholders.

#### 6.0 SPEAKERS

The Conference will be addressed by educators and leading professionals involved in TVET with representation from schools, universities, institutions, agencies, organisations and industry.

#### 7.0 REGISTRATION

- Conference is open to all interested participants.
- There is no registration fee.

#### 8.0 DATES AND VENUE

Dates: 11-12 February, 2020 Venue: NINAD Auditorium

PSS Central Institute of Vocational Education,

Shyamla Hills, Bhopal-462013,

Madhya Pradesh, India

# National Conference on Re-imagining

### Technical Vocational Education and Training for the Changing World: Perspectives and Practices 11-12 February 2020

**Provisional Programme** 

Time	Activity
Day 1	Tuesday, 11 February 2020
09:30 am-10:00 am	Registration, Visit to Exhibition and Campus Tour
10:00 am-11:00 am	Inaugural Session
11:00 am-12:00 pm	Keynote Session I: Emerging Perspectives in Future of Work
	Session Overview: Global trends have significant implications on vocational education and training in terms of both threats and opportunities. The impact of technological and social changes on work opportunities and market will differ across developing economies. These changes will present challenges and opportunities to the future workforce. The session will examine the technological and demographic changes across the economic spectrum and occupations.
12:15 pm -01:30 pm	Technical Session–I: Transforming TVET for Industry 4.0
	Session Overview: Under Industry 4.0 the 'real' and the 'virtual' world are seamlessly connected giving rise to what is known as cyberphysical production system. As a result, the traditional manufacturing processes are undergoing an enormous transformation which will change the way companies approach manufacturing. India has vast opportunities in vocational education and employment as Industry 4.0 will help in evolving India as manufacturing hub for quality products at lower costs. The session will focus on policy formulation for vocational education to drive Industry 4.0 and the roadmap for a successful transition.
02:30 pm- 03:30 pm	Panel Discussion: Up-Skilling and Re-Skilling of Today's Workforce and TVET Teachers Development
	The panel discussion will mainly focus on the following key questions:
	1. What is the role of TVET with regard to Industry 4.0?
	2. What are the obstacles and possible solutions for TVET provisions ?
	3. What are the needs of TVET providers for making people job ready for Industry 4.0?
	4. What are requirements for up-skilling and re-skilling of TVET teachers / trainers for developing new workforce?

Time	Activity
03:45 pm- 05:30 pm	Technical Session - II: Good Practices of TVET in India
	Session Overview: This session will focus on sharing personalized experiences in the rapidly changing industry demands for new skills, new curriculum designs, National Occupation Standards, innovative ideas in teaching learning and field practices The session on good practices on TVET in schools will cover various scalable innovations in various states/UTs of India.
Day 2	Wednesday, 12 February 2020
09:30 am-11:15 am	Keynote Session – II: TVET Excellence and Innovation
	Session Overview: The UNESCO-UNEVOC International Centre at Bonn acts as a key Centre for UNESCO's international programme on Technical and Vocational Education and Training. The technical session will elaborate on the strategies adopted and action taken by the UNEVOC Centers to increase the opportunities for productive work, sustainable livelihoods, personal empowerment and socio-economic development. The session will provide a platform for discussion on training methods and systems developed in different countries for acquisition of knowledge and skills for the world of work and entrepreneurship.
11:30 am- 01:00 pm	Technical Session – III: TVET for Rural Transformation and SDG 2030 Implementation
	Session Overview: Rural communities are experiencing fundamental changes due to the new demands of the industry, globalization, technological transformation and new skill demands. Rural transformation depends on many factors including rural-urban linkages and is influenced by employment and skilling opportunities. TVET can support rural transformation through capacity building of rural youth for various farm and non-farm activities and emerging employment opportunities.
02:00 pm - 03:15 pm	Technical Session – IV: Future Agenda for TVET
	Session Overview: In this session the conference will provide the forum for setting up the future agenda for leading TVET system to meet the expectations and demands of the society and industry. It will also provide direction for improving the collaboration between the school and industry for meeting future skill needs and linking vocational education to higher education. It will also set the agenda for greening TVET and the models that can be adopted for meeting the Sustainable Development Goals.
03:30 pm- 05:00 pm	Technical Session - V: Good Practices in TVET in India
	Session Overview: This session will focus on sharing personalized experiences in the rapidly changing industry demands for new skills, new curriculum designs, National Occupation Standards, innovative ideas in teaching learning and field practices The session on good practices on TVET in schools will cover various scalable innovations in various states/UTs of India.
05:00 pm- 05:30pm	Conclusion, Recommendations and Closing Ceremony

#### Conference Management

#### **Chief Patron**

Dr. H. K. Senapaty Director

National Council of Educational Research and Training (NCERT), New Delhi

#### **Patron**

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#### Conference Secretariat

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#### HOW TO REACH PSSCIVE, BHOPAL?



#### ABOUT PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

The Pandit Sundarlal Sharma Central Institute of Vocational Education (PSSCIVE) is an apex research and development organization in the field of vocational education. It is a constituent unit of the National Council of Educational Research and Training (NCERT), established in 1993 by the Ministry of Human Resource Development (MHRD), Government of India. It is also a UNEVOC (International Project on Technical and Vocational Education) Network Centre in India. The Institute has picturesque 37-acre campus with Departments created for different disciplines, like agriculture and animal husbandry, business and commerce, engineering and technology, health and paramedical, home science and humanities.

The Institute offers quality-training programmes in vocational pedagogy and a wide array of disciplines for the key functionaries in vocational education and vocational teachers. The highly qualified team of the Institute possesses excellent professional skills and experience required to impart training for classroom teaching and training.

The Institute has traversed the path of rapid development in vocational education, often responding positively to the changing needs of the industry and at times initiating significant changes in the field of vocational education. The evolution of the Institute in the last twenty-five years has witnessed various challenges, but these have served as opportunities to explore new horizons and work on possibilities of reorienting strategies for meeting the skill needs of the people at the local and global canvas.



#### Contact Us

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